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Markus Hartmann

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ECKERT SEAMANS CHERIN & MELLOTT, LLC  
U.S. STEEL TOWER  
600 GRANT STREET  
PITTSBURGH, PA 15219-2788

EXAMINER

YI, STELLA KIM

ART UNIT

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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

***Response to Arguments***

1. Applicant's arguments filed June 14, 2010 have been fully considered but they are not persuasive.

Applicant Argues:

a) Bressan calls for a two-step process of treating an edge.

b) A person of ordinary skill in the art would have received no assistance from Day in smoothing the rough edges of a plastic porous foam board. Conversely, the frayed edges of fibrous sheet material in a sandwich panel of the type disclosed by Day could not possibly be smoothed and sealed by the method according to the invention.

Examiner respectfully disagrees with the Applicant's above arguments and would like to point out the reason(s) as discussed in the rejection:

a) Bressan discloses in Col.5, lines 16-28:

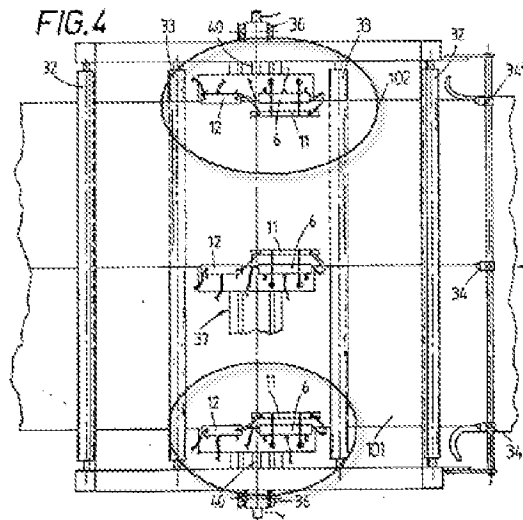
“Sheet 1 is then passed about first deflecting rollers 32. The two halves 101, 102 of sheet 1 longitudinally cut by blade 34 are conveyed upwards and downwards, respectively, and passed about second deflecting rollers 33.

Afterwards the **cut edges of sheet 101, 102 are each subjected to a thermal action by assembly 6 which through electrical resistance 8 protected by insulator 9 produces heat which is irradiated through flanges 10 and 10' and softens edges 4 and 4' of sheet 1 guided between skids 11 and 11' in which cooling water fed through conduits 41 is circulated.** Each sheet 101, 102 is then passed along forming an assembly 12, better shown in Fig.7, which

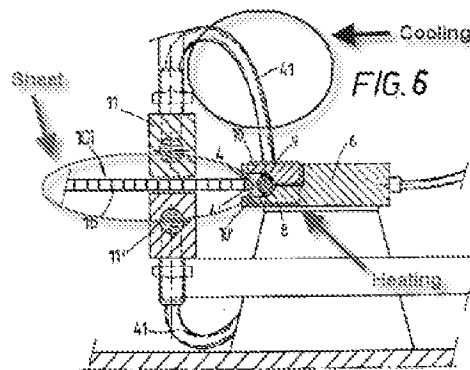
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by means of its shaped sections 13 and 13' joins by contact softened edges 4 and 4', thus closing the side edge of each alveolate sheet 101, 102."

Figure 4 illustrates assembly 12 in connection with assembly 6 see below:



Furthermore, Figure 6 illustrates that heating 8 and cooling 41 are performed simultaneously to heat and cool the edge of the sheet 4, 4' while smoothening the cut edges and sealing by the connected assembly 12. See below:



Therefore, Bressan does teach simultaneously maintaining adjacent peripheral surface areas of the plastic web in the smoothing device at a temperature below the softening temperature of the thermoplastic synthetic material by cooling.

b) The test for obviousness is not whether the features of a secondary reference may be bodily incorporated into the structure of the primary reference; nor is it that the claimed invention must be expressly suggested in any one or all of the references. Rather, the test is what the combined teachings of the references would have suggested to those of ordinary skill in the art. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981).

Bressan discloses a method of thermoforming semifinished plastic products. Day teach that plastic foam cores such as polyvinyl chloride (PVC) are used to form sandwich panels (Col.2, lines 34-37) and that panel applications are commonly made from plastic extruded porous foam cores such as polyvinyl chloride (PVC) formulations (Col.1, lines 63-66). The fibrous sheets 42 of Day are attached to such foam boards made of PVC and together are cut. Such cutting produces frayed edges. Day discloses that such fraying action is extensive for fibrous webs which have been attached to the foam board (i.e. such as PVC foam core) by means which maintain their fibers in a substantially dry and porous state (Col.7, lines 65-67 through Col.8, lines 1-2). Bressan's method can be used on plastic materials that are thermoformable. Day teach a thermoformable plastic foam core material such as polyvinyl chloride that is used in forming panel applications or plastic products and discloses a need to seal and smoothen the edges of a foam board that is made in integral with fibrous sheets.

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Therefore, it would have been obvious to one of ordinary skill in the art to have substituted the plastic porous foam as taught by DAY for the thermoplastic material of BRESSAN for the predictable results of manufacturing a thermoplastic foam board having a coarsely porous core and to seal and smooth the fray edges of the said plastic porous foam web.

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Stella Yi whose telephone number is 571-270-5123. The examiner can normally be reached on Monday - Thursday from 8:00 AM to 5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Christina Johnson can be reached on 571-272-1176. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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SY

/Jeff Wollschlager/  
Primary Examiner, Art Unit 1791